UNIDIRECTIONAL MESSAGE MASKING AND VALIDATION
SYSTEM AND METHOD

ABSTRACT

5   A system for secure communication. A random value
generator is configured to generate a random value. A
message validation code generator is coupled to the random
value generator and configured to generate a message
validation code based on a predetermined key, a message, and
10   the random value. A one-time pad generator is coupled to
the random number generator and configured to generate a
one-time pad based on the random value and the predetermined
key. And a masked message generator is coupled to the one-
time pad generator and configured to generate a masked
15   message based on the one-time pad and the message. In a
particular aspect, a protected message envelope generator is
coupled to the random value generator, the message
validation code generator, and the masked message generator,
and is configured to generate a protected message envelope
20   based on the random value, the message validation code, and
the masked message. In another aspect, a protected message
envelope reader is configured to receive a protected message
envelope and generate a random value, a masked message, and
a first message validation code based on the received
25   protected message envelope. A one-time pad generator is
coupled to the protected message envelope reader and is
configured to generate a one-time pad based on the random
value and a predetermined key. A message unmasker is
coupled to the one-time pad generator and protected message
30   envelope reader, and is configured to generate an unmasked
message based on the one-time pad and the masked message.